



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: May 5, 2009

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Contract For Design Of Advanced Treatment Solutions For The William B. Cater Water Treatment Plant

RECOMMENDATION: That Council:

- A. Authorize the Public Works Director to negotiate and execute a contract with Carollo Engineers (Carollo) in the not-to-exceed amount of \$1,495,000 for the design of Advanced Treatment Solutions for the William B. Cater Water Treatment Plant (Cater); and authorize the Public Works Director to approve expenditures up to \$150,000 for cost increases due to unanticipated changes in the scope of work;
- B. Authorize the transfer of \$1,645,000 of Water Fund unappropriated reserves to the Water Fund Fiscal Year 2009 Capital Program Budget; and
- C. Adopt, by reading of title only, A Resolution of the Council of the City of Santa Barbara Declaring its Official Intent to Reimburse Certain Expenditures Incurred for the Cater Ozone Facility from the Proceeds of Future Indebtedness.

DISCUSSION:

The City owns and operates Cater, which treats drinking water for Santa Barbara, Montecito, and Carpinteria. As part of the treatment process, chlorine is added to the water to kill bacteria and other disease-causing agents. Chlorine also binds with naturally occurring organic material in the water, forming compounds referred to as disinfection by-products (DBPs). DBPs may cause cancer in humans, if consumed in high doses over a lifetime. As a result, the United States Environmental Protection Agency (EPA) has issued rules restricting the allowable levels of DBPs in drinking water. The rules were implemented in two stages: the Stage 1 DBP Rule in 2004, whereby changes were made to the water distribution system for compliance; and the Stage 2 DBP Rule, effective in 2012, which will require changes to the water treatment process at Cater.

Since 2004, staff has been working with Carollo to determine the best water treatment solution at Cater for compliance with the Stage 2 DBP Rule. Carollo was selected for this work through a competitive Request For Proposal process. A number of different approaches for treatment were investigated through bench-scale testing and pilot studies. The results of these investigations determined that using ozonation or

chloramination, instead of chlorine, would meet the Stage 2 DBP Rule. Additional investigation demonstrated that ozonation is the best approach, since it actually removes the organic materials that create DBPs.

The results of the investigations and the preliminary costs for ozonation treatment were presented to Council on September 25, 2007, and subsequently to the Boards of Directors for both Montecito and Carpinteria Valley Water Districts. They all concurred with the proposed approach of using ozonation as the treatment technology for complying with the upcoming Stage 2 DBP Rule.

Subsequently, the Zaca Fire burned a large portion of the Santa Ynez River watershed, significantly changing the water chemistry. On June 24, 2008, Council authorized a supplemental pilot study and preliminary design of advanced treatment solutions at Cater. At that time, staff conveyed to Council that upon completion of the pilot study and preliminary design, staff would return to Council for authorization of a contract with Carollo for final design of an advanced treatment solutions project that would incorporate the pilot study findings. The results of the supplemental pilot study and preliminary design confirm that, despite changes in water chemistry, ozonation is still an appropriate technology for treating Santa Ynez River water for compliance with the upcoming Stage 2 DBP Rule.

Carollo has submitted a proposal for \$1,495,000 to perform the final design for advanced treatment solutions at Cater. Staff has reviewed the costs and the scope of work for the design, and determined that both are appropriate for the size and complexity of the project. Staff requests an authorization allowance for extra services of \$150,000, or approximately 10%, which is based on the size and type of the scope of services. The total amount of the contract, including extra services funding, is \$1,645,000.

The design of Advanced Treatment Solutions at Cater represents the Carollo's final phase of work on assisting the City with meeting the Stage 1 and 2 DBP Rules. At the time of award for a construction contract, staff will solicit a proposal from Carollo to provide engineering support services during construction, which is the City's standard practice for complex projects.

BUDGET/FINANCIAL INFORMATION:

The cost for design and construction of the proposed advanced treatment solutions project at Cater is anticipated to be approximately \$20 million. To meet EPA deadlines for the Stage 2 DPB Rule, the City must proceed with design of the project ahead of securing financing. The City has submitted an application for a \$20 million State Revolving Fund (SRF) loan to finance the design and construction of this project, which is the maximum amount for an SRF loan. While awaiting final approval of the SRF loan, staff recommends using available Water Fund reserves for this project. Upon receipt of the loan, these funds would be replaced in the reserves.

If the City is unable to obtain a SRF loan, we will pursue issuance of debt to fund this project. Because we desire to finance both design and construction, it is necessary for Council to adopt a Resolution Of Intention to permit reimbursement of project design costs from the future issuance of tax-exempt debt. Adoption of the resolution will preserve that right, without committing the City to any debt issuance or any project expenditures. Since the project has yet to be designed, the Resolution Of Intention is written to allow reimbursement of up to \$25 million. This will protect the City's ability to reimburse expended funds, if project costs exceed current estimates. Montecito and Carpinteria Valley Water Districts, under a Joint Powers Agreement, will together provide 39% of the funding for this work. These entities have received presentations from the City on the proposed work, and their respective Boards of Directors have been advised and concur with the proposed approach.

At its regular meeting on April 13, 2009, the Board of Water Commissioners voted 4/0 to concur with staff's recommendation as contained in this Council Agenda Report.

PREPARED BY: Catherine Taylor, Water System Manager/CT

SUBMITTED BY: Christine Andersen, Public Works Director

APPROVED BY: City Administrator's Office